$\qquad$

CHAPTER 5
SEC 5.EXPONENTS AND THEIR PROPERTIES
1: What does $a^{3}$ mean:

2: What is the product rule (for exponents)

3: When you divide powers with the same base what must you do with exponents in the quotients? Write the algebraic formula.

4: What is the power rule for exponents?

5: Complete this sentence "Any nonzero number raised to the 0 power is $\qquad$ "

Do these problems: 5.1 (page 292):9; 15-37 (odd); 49,50,53; 57-75 (odd)
5.2 NEGATIVE EXPONENTS AND SCIENTIFIC NOTATION

1. $x$ and $x^{-1}$ are $\qquad$ of each other
2. If $x=23,400,342$ then $x^{-1}$ is a very (SMALL or LARGE) number. (Circle the correct answer).
3. Multiply your age by 8 and leave the answer in scientific notation.

Do these problems 5.2 (page 300):5-21 (odd); 25-31 (odd); 33-53(odd); 93-101 (odd); 103-111 (odd)

## Sec 5.3 POLYNOMIALS

1: Write the terms of this polynomial: $3 t^{4}-5 t^{6}-4 t$

2: The constant factor, in front of the variable, is called what? (see page 305)

3: What is the LEADING term in any polynomial (pg 305).

4: What is meant by the DEGREE of the polynomial.

6: In what order should polynomials with only one variable be arranged?

Do these problems: 5.3 (page 308): $13,15,17,27,28,37-47$ (odd); $51,55,57$
$\qquad$

Sec 5.4. ADDITION AND SUBTRACTION OF POLYNOMIALS
1: When adding polynomials we combine $\qquad$ terms. (Page 312)

2: Give an example of two LIKE terms: $\qquad$

3: Give an example of two terms that are NOT like terms: $\qquad$

4: What is the opposite of a polynomial?

Do these problems: 5.4: (page 317): 5-15 (odd); 27,29; 31,32,33,34;37-47(odd)
Sec 5.5 MULTIPLICATION OF POLYNOMIALS
1: If you were to multiply a binomial by a trinomial, how many terms might you expect in the product before combining?

2: How do you check your answer after multiplying polynomials?

Do these problems and check your answer: 5.5: (page 325): 7-21(odd); 37-49 (odd); 57-63 (odd)
5.6: SPECIAL PRODUCTS

1: The FOIL method can be used only when multiplying $\qquad$ (monomials, binomials,trinomial or any polynomial).

2: Using the letters $A$ and $B$ write the equation for the product of a SUM and a DIFFERENCE. (page 329)
3: Is this a true statement $(a+b)^{2}=a^{2}+b^{2}$ ?

Do these problems and check your answer: 5.6 (page 334): 5-31 (odd); 39-59 (odd); 67-75 (odd)
5.7: POLYNOMIALS IN SEVERAL VARIABLES

1: Complete this sentence (page 339): "The degree of a monomial with two or more variables is...."

2: Complete this sentence (page 339); "Like, or Similar, terms either have....

3: Review Example 8c(page 340) and show me how to check the answer by evaluation.

Do these problems and check your answer: 5.7 (page 342): 9, 21, 25-31(odd); 33-39 (odd); 51-59 (odd)
5.8: DIVISION OF POLYNOMIALS.

1: You have just divided one polynomial by another and found the quotient. How do you check your answer.

Do these problems and check your answer: 5.8 (page 350): $5-12 ; 17,18,19,20,23,24,25,27,29,33$

